

MINUTES

TRI-SERVICE CADD/GIS TECHNOLOGY CENTER

ENVIRONMENTAL FIELD WORKING GROUP MEETING

AT JOINT

FIELD WORKING GROUP/FIELD TECHNICAL ADVISORY GROUP
(FTAG) MEETING

May 21 - 23, 1996

Holiday Inn, Arlington, Texas

June 5, 1996
Final

Tri-Service CADD/GIS Technology Center
Information Technology Laboratory
USAE Waterways Experiment Station
3909 Halls Ferry Road
Vicksburg, Mississippi 39180-6199

Meeting Agenda

21 May 1996

| | | |
|------|--|---------------------------------|
| 0800 | Introduction and Instructions by FTAG | Full Assembly Gary Huneycutt |
| 0845 | Engineering Document Management Systems | Dave Jordani |
| 0930 | FY96 in Review Update FY96 Work Plans Timeline Changes Monetary Needs Prepare for Back briefing Feedback on Membership Experience with Task Groups Handling MIPRs | Individual Group Meetings |
| 1030 | Back brief (20 Minutes/FWG) Brief FY96 Accomplishments Determine Membership Problems/Requirements Updated Work Plan Experience with Task Groups Handling MIPRs | Full Assembly FWG Chairs |
| 1200 | Lunch | |
| 1300 | Back brief (continued) | |
| 1500 | Break | |
| 1515 | Develop Goals and Objectives for FY97 | Individual Group Meetings |
| 1600 | Brief FTAG on Goals and Objectives | FTAG/FWG Chairs |
| 1700 | FTAG Selects Goals and Objective for FWGs FWGs Adjourn | FTAG |

22 May 1996

| | | |
|------|---------------------------------------|---------------------------|
| 0800 | FTAG Gives Goals & Objectives to FWGs | Full Assembly |
| 0830 | Rank/Resolve Center Projects | Individual Group Meetings |
| 1000 | Break | |
| 1015 | Rank/Resolve Center Projects | Individual Group Meetings |
| 1100 | Develop Action Plans | Individual Group Meetings |
| 1200 | Lunch | |

| | | |
|------|-----------------------------|---------------|
| 1300 | Develop Back brief | |
| 1400 | Brief Assembly | |
| | Goals & Objectives | |
| | Action Plans | Full Assembly |
| 1700 | Facilitators Meet with FTAG | |
| 1730 | Adjourn | |

23 May 1996

| | | |
|------|---|---------------------------|
| 0800 | FWG Chair Briefings | |
| | Evaluate Funding Issues | Individual Group Meetings |
| | Reimbursable | |
| | Future Approach | |
| | Consider Need for New or Changed FWGs | |
| | Feedback on Communication Devices | |
| | New Ideas for the Symposium | |
| | Recommendations on Project Call Process | |
| 1130 | Adjourn | |

Future Environmental Field Working Group (FWG) Meetings

The next Environmental FWG meeting is currently scheduled for July 31 (8:00 am - 4:30pm) - August 1 (8:00 am - 4:00pm), 1996 at San Diego, California. Travel days to and from the meeting will be on July 30 and August 2 (or the night of August 1). The primary focus of this meeting will be to finalize the Environmental FWG's FY96 project (Tri-Service Center Task No. 106), to prepare a detailed scope of work for the Environmental FWG's FY97 project, and to prepare detailed scopes of work for projects to obligate potential remaining FY96 funds (if available). We will also have a field trip to one or more Navy installations in the area.

Environmental FWG Attendees

1. Name: Phil Hunter
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E-mail Address: phunter@afceeb1.brooks.af.mil

2. Name: Christopher Kyburg
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3. Name: Steven C. Gonzales
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4. Name: Logos Yuen
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5. Name: Thomas H. Stephan, R.A.
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6. Name: Bobby Carpenter
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Tuesday Meeting and Back Briefing to FTAG Concerning FY96 Activities

Mr. Christopher Kyburg, current FWG chair, presented the briefing.

FY96 Meetings:

The Environmental FWG met in February 1996 at Arlington, Texas. The primary focus of the meeting were: (1) to discuss the FWG's FY96 project, (2) to review the Environmental Hazards point symbols (A copy of the point symbols is included in Appendix A), and (3) to design the content of the Environmental FWG's internet web page.

Mr. Randall Mayne, USAE District Fort Worth, hosted the FWG's field trip to the Fort Worth District. The purpose of the trip was to see how the Fort Worth District was using CADD and GIS technology to accomplish their projects and assignments.

FY96 Project:

The Environmental FWG's FY96 project is Task No. 106, entitled "Identify and Review Environmental Restoration/Compliance Initiatives and Communicate with Other Agencies/Organizations." The project is on schedule. A project scope is included in Appendix B. A summary of the project status is as follows:

a. A survey questionnaire form was developed. Input has been obtained through a combination of telephone interviews and mailouts of the form. A copy of the form can be downloaded from the Environmental FWG's internet web page.

b. The information gathered is being compiled in a Microsoft Access database. To date, the database contains a total of 67 environmental restoration/compliance (ER/EC) Points-Of-Contact (POCs), 32 offices performing some type of ER/EC work, 22 offices with available ER/EC electronic data, 32 offices which use either CADD or GIS to perform ER/EC work, and 29 organizations which have internet web pages or bulletin board services.

c. The capabilities and information discussed in the February 1996 meeting were added to Environmental FWG's internet web page. The Environmental FWG's web page internet URL address is <http://fwgcom.wes.army.mil/fwg/environ/environ.htm>, or it can be accessed through the Tri-Service CADD/GIS Technology Center's internet web page at internet URL address <http://mr2.wes.army.mil> (Select Field Working Group option, then select Environmental FWG).

FWG Membership:

The Environmental FWG needs the following additional members:

- 1 Air Force - Bill Lopp, HQ AETC/CEVR, 266 "F" Street West, Randolph AFB, TX 78150, phone 210-652-3302, Email: loppb@hqce.aetcf.af.mil. was approved by the FTAG.

- 2 Army
- 1 Corps of Engineers

Environmental Field Working Group Objectives

The Environmental FWG did not change the broad objectives which were developed at the May 1995 meeting. The four broad objectives were identified are:

- a. Implementation of CADD/GIS Technology for Environmental Business Practices (Implementation).
- b. Evaluate and Develop Environmental Training and Installation Support (Procurement and Installation).
- c. Develop Evaluation Standards for Feedback, and Provide Feedback (Evaluation).
- d. Review, Identify, and Communicate with Other Environmental DoD and Non-DoD Initiatives (Initiation/Awareness). This objective was the focus of the Environmental FWG's FY96 project.

The projects/action items which have been identified under each objective are as follows:

a. *Implementation of CADD/GIS Technology for Environmental Business Practices (Implementation)* - Identified action items include: (a) Tri-Service Spatial Data Standards, domains, definitions, and transfer standards for environmental restoration and compliance; (b) environmental database or CD subscription for federal/state/local regulations, applicable or relevant and appropriate requirements (ARARs) "yellow pages", toxicity reports, etc. (make available on Tri-Service Center's internet web page); (c) groundwater modeling (includes groundwater modeling/GIS link); (d) risk representation graphic standards; (e) archiving of environmental records with link to GIS (document imaging, storage, retrieval system); (f) environmental symbols and visualization tools for GIS; (g) evaluate and recommend environmental data acquisition, data interpretation, data consolidation, remote sensing, etc. methods; (h) interface legacy programs with GIS (interoperability); (i) review and publish standard environmental restoration and compliance SQL queries (SAS SQL Query Developer); (j) acceptable treatment technologies; (k) link with EPA site technology program; (l) expert systems decision system; (m) virtual project accessible on internet.

b. *Evaluate and Develop Environmental Training and Installation Support (Procurement & Installation)* - Identified action items include: (a) Web demonstration of environmental GIS which represents the life cycle approach to environmental restoration and compliance at an installation (*FY97 Project Proposal*); (b) evaluate and recommend CADD and GIS hardware/software, and environmental software, for environmental applications at Tri-Service

installations; (c) evaluate and recommend environmental software for inclusion in NAVFAC CAD2 contract; (d) support for contracting for electronic deliverables; (e) evaluate, and develop recommendations concerning available CADD/GIS/Computer training for environmental applications; (f) develop CADD/GIS/computer training for environmental applications which is not currently available.

c. *Develop Evaluation Standards for Feedback, and Provide Feedback (Evaluation)* - Identified action items include: (a) evaluation checklist; (b) technical support group (standards, software, hardware); (c) communications (case studies, lessons learned, e-mail, POC's).

d. *Review, Identify, and Communicate with Other Environmental DoD and non-DoD Initiatives (Initiation/Awareness)* - Identified action items include: (a) identify other agency environmental initiatives which are similar (*FY 96 project focus*); (b) review and input from non-DoD organizations; (c) Upkeep of Environmental FWG's internet web page (including Initiatives database).

Wednesday Meeting and Back Briefing To FTAG

Mr. Christopher Kyburg presented the briefing.

Top Ten Projects: The Environmental FWG reviewed the list of current and proposed Tri-Service Center projects and selected the following as the top ten, listed in order of importance:

1. Task No. 97-1
2. Task No. 39
3. Task No. 6
4. Task No. 104
5. Task No. 97-13
6. Task No. 97-17
7. Task No. 111
8. Task No. 97-14
9. Task No. 3
10. Task No. 101

Environmental FWG Objectives: The four broad objectives are as discussed above.

Evaluate WWW Needs for Tri-Service Center:

- a. Insure that sufficient disk space is available for web pages and data.
- b. Insure that manpower and labor is available to review proposed web page content prior to posting.

c. Insure that manpower and labor is available to maintain the Environmental FWG's web page and initiatives database.

Thursday Back Briefing to FTAG

Mr. Christopher Kyburg presented the back briefing.

Next Chair: Sam Bass (Army Corps)

Next Vice Chair: Logos Yuen (Air Force)

New Symposium Ideas:

- Provide training concurrent to the symposium sessions.
- Bring in other Federal Agencies involved in CADD/GIS/AM/FM.
- Provide NO MORE THAN ONE DAY Executive Training Session (INVOLVE SENIOR MANAGEMENT!).
- Encourage A-E/Government project meetings
- Encourage alternate years on alternate coasts
- Overview of FCADD2 contract execution/coordination

Feedback on “Call For Projects” Process:

Comment: Not all FWG members received the notice.

Overview of FWG Objectives and Project:

Objective: Evaluate and Develop Environmental Training and Installation Support.

Project: Create Web demonstration of Environmental GIS which represents the Life Cycle approach to Environmental Restoration and Compliance at an installation. The project will demonstrate the use of the Spatial Data Standards and Symbols.

The project will result in an on-line training tool, a dynamic example of the use of symbols and Spatial Standards, and serve as an on-line reference for layering, line styles and symbology for Environmental GIS.

A scope of work for the project is included in Appendix C.

Ability to Expend Year End Funds: The Environmental FWG can execute end of year funds by the following.

Minimum Lead time: 2 or 3 weeks

Maximum \$\$: \$125,000

Enthusiasm: Yes!

Unsolicited Comments:

Get someone funded and in charge of real estate quality maps for DoD.

Appendix A

Environmental Hazards Point Symbols



















































Note: The symbols have been developed in MicroStation, ARC/INFO, and AutoCad formats and will included on the Tri-Service Spatial Data Standards Release 1.6 CD. They will also be available for download from the Environmental FWG's internet web page (<http://fwgcom.wes.army.mil/fwg/environ/environ.htm>).

Environmental Hazards and Related Point Symbols

| <u>Symbol Number</u> | <u>Symbol Name</u> |
|-----------------------------|---|
| 101 | DoD Environmental Hazards Site Location |
| 102 | DoD Defense Environmental Restoration Program - Formerly Used Defense Site (FUDS) Location |
| 103 | DoD Installation Restoration Program Site Location |
| 104 | Environmental Hazards Point of Potential Concern |
| 105 | Superfund Site Location |
| 106 | Solid Waste Composting Facility |
| 107 | Landfill Gas Collection Well |
| 108 | Landfill Gas Flare Station |
| 109 | Solid Waste Compactor |
| 110 | Solid Waste Recovery Collection Facility |
| 111 | Solid Waste Transfer Station |
| 112 | Soil Sample Location |
| 113 | Sediment Sample Location |
| 114 | Groundwater Sample Location |
| 115 | Surface Water Sample Location |
| 116 | Air Sample Location |
| 117 | Building Environmental Hazard |
| 118 | Contained Hazardous Materiel Storage Building |
| 119 | Contained Hazardous Waste Storage Building |
| 120 | Air Quality Monitoring Station |

| | |
|-----|---|
| 121 | Groundwater Quality Monitoring Station |
| 122 | Surface Water Monitoring Station |
| 123 | Landfill Gas Monitoring Probe |
| 124 | Soil Gas Monitoring Probe |
| 125 | Magnetometer Detection Location |
| 126 | Monitoring Well |
| 127 | Emergency Eyewash |
| 128 | Emergency Shower |
| 129 | Contained Hazardous Waste Storage Area |
| 130 | Contained Hazardous Materiel Storage Area |
| 131 | Potential Release Location |
| 132 | Pollution Source Point |
| 133 | Spill Containment Tank |
| 134 | Spill Response Feature |
| 135 | Equipment Decontamination Pad |
| 136 | Onsite Command Post |
| 137 | Site Information Center |
| 138 | Washdown Water Tank |
| 139 | Existing Aboveground Storage Tank |
| 140 | Existing Underground Storage Tank |
| 141 | Closed Underground Storage Tank |
| 142 | Proposed Underground Storage Tank |
| 143 | Closed Aboveground Storage Tank |

| | |
|-----|-----------------------------------|
| 144 | Proposed Aboveground Storage Tank |
| 145 | Solid Waste Recycling Facility |
| 146 | Landfill Leachate Pump |
| 147 | Landfill Gas Transport Compressor |
| 148 | Landfill Gas Treatment Plant |
| 149 | Landfill Leachate Treatment Plant |
| 150 | Borehole |

| | | | | | |
|-----|---|-----|---|-----|---|
| 101 |  | 120 |  | 139 |  |
| 102 |  | 121 |  | 140 |  |
| 103 |  | 122 |  | 141 |  |
| 104 |  | 123 |  | 142 |  |
| 105 |  | 124 |  | 143 |  |
| 106 |  | 125 |  | 144 |  |
| 107 |  | 126 |  | 145 |  |
| 108 |  | 127 |  | 146 |  |
| 109 |  | 128 |  | 147 |  |
| 110 |  | 129 |  | 148 |  |
| 111 |  | 130 |  | 149 |  |
| 112 |  | 131 |  | 150 |  |
| 113 |  | 132 |  | | |
| 114 |  | 133 |  | | |
| 115 |  | 134 |  | | |
| 116 |  | 135 |  | | |
| 117 |  | 136 |  | | |
| 118 |  | 137 |  | | |
| 119 |  | 138 |  | | |

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Appendix B

Environmental FWG's FY96 Project

Task No. 106

Identify and Review Environmental Restoration/Compliance Initiatives and Communicate with other Organizations

FUNCTION: COMMUNICATION

STRATEGY: COMMUNICATION

TASK#: 106

TITLE: IDENTIFY AND REVIEW ENVIRONMENTAL RESTORATION/COMPLIANCE
INITIATIVES AND COMMUNICATE WITH OTHER AGENCIES/ORGANIZATIONS

1. Originating Office:

Environmental Field Working Group, Chairperson: Chris Kyburg, SOUTHWESTDIV NAVFACENGCOM,
Code 1813.CK, 1220 Pacific Hwy, San Diego, CA 92132, phone: (619)532-1229, FAX: (619) 532-2469,
E-mail: cekyburg@efdswest.navfac.navy.mil

Vice Chairperson: Sam Bass, CEMRD-ED-TG

Air Force Proponent - Gary Huneycutt

Army Proponent - Bart Ives/Rik Wiant (703-695-1375/355-0086), ives@pentagon-acsim1.army.mil

Corps Proponent - James Wolcott (202-761-1200), James Huang (202-761-8883)

Navy Proponent - Stephen Gonzales/Jim Carberry

Center POC - Bobby Carpenter

FWG Proponent - Steve Gonzales

2. Requirement: Facilitate the transfer of information between various tri-service organizations, the Environmental Protection Agency (EPA), and other appropriate organizations in the field of environmental restoration and compliance.

3. Justification/Benefits: There is duplication of effort and insufficient communication in numerous areas involved with the accomplishment of environmental restoration and compliance activities. Many times DoD installations located in close proximity expend resources gathering duplicate information. The lack of communication between the tri-services, federal, state, and local organizations results in the inefficient utilization of resources.

4. Objectives: Objective is to provide a means to transfer information and communicate with various tri-service organizations, the Environmental Protection Agency (EPA), and other appropriate organizations in the field of environmental restoration and compliance.

5. Approach:

a. Develop questionnaire for use in telephone interviews, for mailout, and for posting on the Tri-Service CADD/GIS Technology Center's (TSTC's) Internet Homepage.

b. Contact various DoD Field Operating Activities FOAs, EPA (HQ and Regions), non-DoD federal agencies, state and local agencies, universities, and institutions to identify environmental CADD/GIS restoration and compliance initiatives and information sources. Contact will be made through a combination of telephone interviews and mailed questionnaires.

c. Design database and HTML application permitting direct input of the questionnaire information on the TSTC's Internet Homepage.

d. Develop hardcopy and electronic report summarizing findings. Publish hardcopy report. Make electronic report available on the TSTC's Homepage.

FUNCTION: COMMUNICATION

STRATEGY: COMMUNICATION

TASK#: 106

TITLE: IDENTIFY AND REVIEW ENVIRONMENTAL RESTORATION/COMPLIANCE
INITIATIVES AND COMMUNICATE WITH OTHER AGENCIES/ORGANIZATIONS -
Page 2

6. Cost: \$30,000

7. Product: Written and electronic report summarizing identified information concerning CADD/GIS environmental compliance and restoration initiatives and activities, along with a mechanism for continual input and update of initiatives and activities on the TSTC's Internet Homepage.

8. Customers: Project managers, geologists, engineers, facility engineers, and other personnel involved with environmental restoration/compliance activities.

9. Remarks: This is the Environmental FWG's FY-96 project.

Appendix C

Environmental FWG's Proposed FY97 Project

Web Demonstration of Environmental Geographic Information System (GIS) Technology

FY 97 PROJECT PROPOSAL
for
The Tri-Service CADD/GIS Technology Center

Project Title: Web Demonstration of Environmental Geographic Information System (GIS) Technology

| | | |
|----------------------------|---|---|
| Originating Office: | Environmental Field Working Group FY 97 Project | |
| Name: | Christopher Kyburg | Proponents: |
| Office/Code: | SWDiv, NAVFAC Code 18 | Navy: Christopher Kyburg, Steve Gonzales, |
| | Tom Stephan | |
| Mailing Address: | 1220 Pacific Hwy | Army: Bart Ives |
| City | San Diego | Corps: James Huang, MK Miles, Larry |
| Mann, Sam Bass | | |
| State | California | Air Force: Gary Huneycutt, Phil Hunter, |
| Logos Yuen | | |
| Zip Code | 92132-5190 | |
| Phone Number | 619-532-1998 | |

Requirement:

There is a need to improve the understanding in the field of how to apply the Tri-Service Spatial Data Standards (TSSDS) and Symbols to environmental coverages in a GIS, and how to integrate the use of the TSSDS in the life cycle approach to accomplishing environmental restoration and compliance activities. The tool will be able to fulfill many training and demonstration needs to the field.

Justification and /or Benefits:

An interactive on-line demonstration/tutorial will greatly enhance understanding of use of the standards for Environmental Restoration and Compliance. This project will create such a system using public domain web technology. The TSSDS provides an extensive graphic (symbolology) and nongraphic (database) schema which will serve as a standard format for the use of Computer-Aided Drafting and Design (CADD) and GIS technology in accomplishing various Tri-Service activities. However, there remains a general lack of understanding in the field of how to use the TSSDS as a tool in accomplishing environmental restoration and compliance activities. Guidance and training methods have to be developed in order to overcome this lack of understanding.

Requirement/Objective:

The objective of the project is to provide an on-line training and demonstration tool to help the field understand the application of the TSSDS and Symbols to Environmental Engineering available at no cost to the field. The tool would also be installed on a laptop computer for demonstration purposes at conferences, meetings, and training sessions.

Approach:

Develop an interactive on-line training and demonstration tool. The tool will be installed on the Tri-Service CADD/GIS Technology Center's Environmental FWG's internet web page, as well as provided on a floppy disk/CD for distribution to the field. The tool will be installable on a laptop computer for demonstration purposes at conferences, meetings, and training sessions. The tool will provide the following minimum capabilities: (1) an overview of the life-cycle approach to environmental restoration and compliance; (2) an overview of GIS technology and benefits in the field of environmental engineering; (3) an overview of the TSSDS with guidance on how to implement the TSSDS to accomplish environmental restoration and compliance activities; (4) interactive

maps (small scale and large scale maps accessible through the Internet and transportable on a laptop computer) which demonstrate the use of the environmental graphic (symbolology) and nongraphic (database) standards contained in the TSSDS; (5) sample queries; and (6) an overview of data acquisition, conversion, and formatting methods and procedures. Create interactive maps which demonstrate the standards at various map scales and categories of environmental restoration and compliance. The maps would represent the symbols and standards used for the various media (air water UST etc). Each symbol when selected will provide example data and additional buttons which will offer insight, an example query, database schema, benefits of GIS, etc., associated with the graphical entity.

Costs:

FY 97 - \$75,000

Product:

Electronic software installed on Tri-Service Center's internet web page and floppy disk/CD.

Customers:

All DoD personnel, and their contractors, performing environmental restoration and compliance activities.

Remarks:

This is the Environmental Field Working Group FY97 project. The Environmental Field Working Group can develop a Scope of Work, and a contract awarded to the Tri-Service Center's GIS contractor in FY96, if adequate funds are available.

Project Functional Categories:

Training and Installation Support.